



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Geographical indications and upgrading of small-scale producers in global agro-food chains

Citation for published version:

Tregear, A, Torok, A & Gorton, M 2016, 'Geographical indications and upgrading of small-scale producers in global agro-food chains: A case study of the Makó Onion Protected Designation of Origin', *Environment and Planning A*, vol. 48, no. 2, pp. 433-451. <https://doi.org/10.1177/0308518X15607467>

Digital Object Identifier (DOI):

[10.1177/0308518X15607467](https://doi.org/10.1177/0308518X15607467)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

Environment and Planning A

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Geographical indications and upgrading of small-scale producers in global agro-food chains: A case study of the Makó Onion Protected Designation of Origin



Environment and Planning A

0(0) 1–19

© The Author(s) 2015

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0308518X15607467

epn.sagepub.com



Angela Tregear

University of Edinburgh Business School, UK

Áron Török

Corvinus University of Budapest, Hungary

Matthew Gorton

Newcastle University Business School, UK

Abstract

In the context of the marginalising effects of agro-food chain dynamics on upstream suppliers, this paper examines the extent to which geographical indications may improve the positioning of small-scale producers. Making an original distinction between established and nascent geographical indication systems, the paper undertakes a case study of the latter type (the Makó Onion Protected Designation of Origin, Hungary), hitherto overlooked in the literature. The study adopts a global value chain perspective to analyse three means by which geographical indications may facilitate upgrading (capturing higher margins, stimulating collective action and enabling diversification), finding that none have been delivered via the Makó Onion Protected Designation of Origin. The paper examines the reasons for this, identifying the role played by the political and institutional context. Recommendations are made for improving the upgrading potential of geographical indications when applied to nascent systems.

Keywords

Geographical indications, upgrading, small-scale producers, value chain, Hungary

Corresponding author:

Angela Tregear, University of Edinburgh, 29 Buccleuch Place, Edinburgh EH8 9JS, UK.

Email: angela.tregear@ed.ac.uk

Introduction

While globally, food processing and retail sectors have become increasingly concentrated (Dobson et al., 2003), most branches of agriculture remain characterised by large numbers of family-owned farms, with the effect that power in agro-food supply chains is increasingly skewed towards downstream buyers (Hingley, 2005; Hingley et al., 2006). Small-scale producers, unable to reap economies of scale, face high transaction costs and insufficient ability to deliver the production volume and control systems demanded by multiple retailers. As a result, many are vulnerable to exclusion from mainstream food supply chains (Hanf, 2014; Van Der Meer, 2006), while those that do remain ‘risk becoming simple pieceworkers on their land’ while dominant downstream actors ‘control the means of production and the output, and capture most of the value circulating in the system’ (Trebbin and Hassler, 2012). Over the last few decades, policymakers and scholars alike have asked how small-scale producers can compete effectively in supply chains dominated by increasingly concentrated and more powerful downstream actors.

One mechanism with the potential to improve the fortunes of small-scale producers is geographical indication (GI) legislation. GIs constitute a form of intellectual property rights protection and are defined in the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement as ‘indications which identify a good as originating in a territory... where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin’ (WTO, 1994). The application for a GI typically involves a group of interested parties (e.g. producers) submitting a collectively agreed Code of Practice to the relevant authority, which specifies the production process for the good, its distinctive qualities and the geographic boundaries of the production area. Once a GI has been registered, only those goods which have been made in the production area according to the Code of Practice may bear the GI name. In this way, producers of registered goods are protected from misuse of the name, and therefore the loss of their intellectual property, by non-registered parties (Galtier et al., 2013).

Advocates claim that GIs aid small-scale producers by protecting and rewarding enhanced quality and empowering producer action. For example, Coombe and Aylwin (2011) argue that GIs ‘enable producers to circumvent mass commodity markets’ by exploiting growing niche markets (p. 2029) and can further ‘local farmers’ dignity and autonomy’ (p. 2038) while Rangnekar (2011) writes that GIs offer ‘a remarkable opportunity to resist the erasure of place and participate in social movements of place’ (p. 2057). In EU agro-food policy, GIs are regarded as fundamental to supporting ‘a quality orientation’ (European Parliament and the Council of the European Union, 2012) with the two most important certifications being the Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI).

In the now abundant literature on GIs, studies have been conducted from macro-policy (e.g. Barham, 2003; Coombe and Aylwin, 2011) and developmental perspectives (Kizos and Vakoufari, 2011a; Profeta et al., 2010; Rangnekar, 2011), and amongst the many cases analysed, insights have been revealed into the processes of negotiation around Codes of Practice (e.g. Bowen, 2010; Mancini, 2013; Tregear et al., 2007), power relations between actors (Kizos and Vakoufari, 2011b; Mancini, 2013; Rangnekar, 2011) and the consequences of varying actors’ strategies (Bowen, 2010; Bowen and De Master, 2011; Dentoni et al., 2012). However, although the literature to date provides some important clues about the limitations of GIs as tools for economic development and some of the unintended consequences of implementation, we argue it has two key limitations. First, the vast majority of existing studies conceptualise GI systems¹ as reasonably homogenous, emerging from wider agro-food chains, and relating to them, in a broadly similar way.

To advance understanding, we argue for a need to recognise heterogeneity across GI systems, and we address this here by distinguishing two specific types: (i) *established, mature* systems, in which producer relations are well developed and the protected products possess substantial market reputations yielding significant price premiums, and (ii) *nascent, developing systems*, in which producers' connections to each other are more recently established or fragile, and the protected product's reputation is weaker or more localised, giving consequently less assured premiums. To date, GI research has been based overwhelmingly on cases of the former type, often in countries with political and institutional orientations favourably disposed to GIs, for instance Parma Ham and Parmigiano-Reggiano cheese in Italy (Dentoni et al., 2012), and Roquefort and Comté cheeses in France (Bessi re, 1998; Bowen and De Master, 2011; Torre, 2006). Whilst such work often confirms that GIs deliver significantly higher margins to producers compared with non-designated alternatives, we argue similar results cannot be assumed for nascent systems – particularly those located in countries with unfavourable political and institutional infrastructure for GIs – because in these systems, GIs act as a potential contributor to reputation building, rather than protector of an existing, high value asset. To address this gap, our research into the upgrading potential of GIs is focused on a nascent GI system in a country context non-typical of prevailing work. The second limitation in the GI literature is that much case study analysis is conducted without reference to a strong theoretical underpinning or analytical framework, in which the observed dynamics of GI systems are systematically examined and robustly explained. We address this in the present study by applying the global value chain (GVC) framework (Gereffi, 2014; Gereffi et al., 2005; Ponte and Gibbon, 2005), supported by theory drawn from the agro-food studies literature. The GVC approach is recognised widely as appropriate to the analysis of agro-food supply chain dynamics, strategies for upgrading and explanation of outcomes for farmers, and has been highlighted as valuable specifically for the study of GIs (Bowen, 2010), although to date its application has not been fully realised.

Empirically, the paper analyses the case of the Hungarian Mak  onion (*Mak i v r shagyma* or *Mak i hagyma*), examining specifically the extent to which the GI has improved the fortunes of small-scale producers.² Although farmers in the area of Mak , a small town on Hungary's Southern Great Plain (*D l - Alf ld*), have a long history of onion production, their GI-related collaboration is a recent phenomenon, and although the product does have renown, it is modest in nature and confined to the domestic market. Moreover, GIs generally remain largely peripheral to Hungary's agro-food policy. After the downfall of state socialism the country was initially preoccupied with liberalising prices and supply chains, attracting foreign direct investment and redistributing land. More recently, Hungarian agricultural policy has focused on implementation of the EU's Common Agricultural Policy and boosting returns to farmers through direct payments. Its rural development plan for 2007–2013 made no mention of GIs or specific European designations such as PDO and PGI (MARD, 2011). Hence the case is a good example of a nascent GI system located in a non-typical country for GI research.

The next section of this paper introduces the GVC analytical framework and body of theory which together inform this study, before considering the implications for whether, in principle, GIs may improve the fortunes of small-scale producers. This is followed by a discussion of the methodology and sources of evidence. The findings of the analysis are then reported and the subsequent discussion reflects on how the results compare with the theoretical propositions presented earlier. The paper concludes with development recommendations for the Mak  onion PDO and nascent GI systems like it, as well as

critical reflections on the conceptualisation of GIs in the GVC and agro-food studies literatures.

GVCs and quality conventions in the agro-food sector

The GVC perspective conceptualises contemporary economies as dense and spatially dynamic networks of firms, in which different configurations of inter- and intra-firm relationships can emerge along supply chains (Gereffi, 2014) according to salient features of the chain and the governance imperatives of lead firms (Ponte and Sturgeon, 2014). Through these features and imperatives, GVC analysis can explain how firms, such as small-scale suppliers in the global agro-food sector become excluded or marginalised from value chains, as they become ‘captured’, or transactionally dependent on larger, more powerful buyers (Gereffi et al., 2005). Within the GVC perspective, quality marks and certifications are generally conceptualised as tools by which near-market lead firms in buyer-driven chains may control and align the activities of other upstream firms, to their own advantage (Ponte and Gibbon, 2005).

Although acknowledging its usefulness, critics argue that the GVC perspective has too narrow a focus on commercial transactions between actors in a vertical chain (Coe et al., 2008). Consequently, the GVC approach risks downplaying the role of states in giving momentum to upgrading trajectories, e.g. via investments in R&D, training and infrastructure (Neilson et al., 2014). The approach also operates with a weakly theorised notion of quality (Morgan et al., 2006), and underemphasises the role of institutional and collective power, as well as wider social and institutional contexts, in shaping firms’ goals, behaviours and interrelations, as highlighted in the Global Production Network literature (Barrientos et al., 2011; Henderson et al., 2002). As these wider dimensions are pertinent to the present study, we looked to the agro-food studies literature for further theoretical insights. In this literature, authors draw from conventions theory (CT), which proposes that actor configurations and relations in a system are shaped by ‘conventions’: normalised routines and habits (Morgan et al., 2006), which over time are absorbed into state or regional policies, regulations and institutions (Parrott et al., 2002; Ponte and Gibbon, 2005). From the now familiar six categories of conventions originally proposed by Boltanski and Thévenot (1991) (market, industrial, domestic, civic, inspirational and opinion), archetypal ‘worlds of production’ have been conceptualised (Storper and Salais, 1997), these being spaces in which actors may operate and interrelate according to distinct underlying norms and principles (Murdoch et al., 2000; Murdoch and Miele, 1999). Two such archetypes, relevant for the current study, are the ‘*industrial*’ world, characterised by standardised-generic production, price-driven transactions and quality manifest through official standards and technical criteria, and the ‘*interpersonal*’ world, characterised by dedicated-specialised production, reciprocal and trust-based exchanges, and quality manifest through local, personal and experiential judgements (Murdoch and Miele, 1999). Interestingly, whilst quality marks and standards are generally considered, by both CT and GVC scholars, as artefacts of the industrial world (Ponte and Gibbon, 2005), GIs, specifically, are associated with the domestic conventions of the interpersonal world, as expressions of localised, inherited skills and community-based endeavour (e.g. Morgan et al., 2006; Ponte and Sturgeon, 2014). In the context of established GI systems in countries with long histories of institutional support, such a conceptualisation may have merit. However, for nascent GI systems, particularly in non-typical countries, the implications are less clear. What is the potential for GIs to improve the fortunes of small-scale producers in value chains, when state and regional institutions are not conducive to an

interpersonal archetype, and where the inter-relationships between firms in the chain – not least between producers themselves – are only recently established and uncertain? Before investigating this empirically, the next section presents in more detail the arguments and evidence from existing studies in the GI literature.

The upgrading potential of GIs for small-scale agro-food producers

To explore the potential of GIs to enhance the fortunes of small-scale producers, we return to the GVC literature, which articulates specific upgrading strategies that disadvantaged firms may pursue in order to leverage improved value chain positions (Gereffi and Fernandez-Stark, 2011; Ponte and Ewert, 2009). Three of these strategies are particularly relevant to GIs, and we introduce and examine each in turn: (i) *capturing higher margins for existing products*, (ii) *engaging in collective action* and (iii) *diversifying into new products*.³

Capturing higher margins for existing products

The first way that small-scale producers may upgrade is by capturing higher margins for existing products, for example by moving up the quality grade ladder (Gibbon, 2001) or protecting an existing reputation for quality. The economic theory often invoked to explain how quality standards such as GIs work within markets tends to adopt an industrial world perspective of firm behaviour and inter-relationships, i.e. transactions are price driven and remote, and the impulse of actors is to exploit others unless regulations and economic incentives prevent this. Quality marks, including GIs, are conceptualised as one means of prevention: by embodying quality information transmissible across distances, GIs reduce the information asymmetry between remotely situated producers and buyers in a value chain (Akerlof, 1970), therefore making it possible for small-scale producers to convey the higher quality attributes of their goods and hence capture a premium (Moschini et al., 2008). Via the same mechanism, GIs also prevent leakage of premiums by preventing fraudulent use of GI labels by firms not part of the registered system (Profeta et al., 2010). Evidence relating to established GI systems does support the existence of this mechanism: e.g. Torre's (2006) observations of the long-term price maintenance of *Appellations d'Origine Contrôlée* wines in France, De Roest and Menghi's (2000) analysis of milk prices destined for PDO Parmigiano Reggiano cheese and studies of Jersey Royal Potatoes and Mela Val di Non apples, which show superior returns to farmers compared with non-designated equivalent products (London Economics, 2008; Wilson et al., 2000).

However, established GI systems do not always deliver better returns for small-scale producers, even when buyers pay a premium. In some cases, premiums are captured and retained by the largest (often downstream/processing) firms in a system (e.g. Bowen, 2010; Galtier et al., 2013), in a dynamic reminiscent of 'lead firm' manoeuvrings and industrial world conventions. Other cases of established GI systems reveal that the regulatory GI process itself can fail to redress these imbalances, for example the tendency for GI awarding authorities to adopt a 'lowest common denominator' threshold of inclusion, so that larger, more industrial firms are admitted to the producer group (Rangnekar, 2011). In these cases, smaller scale producers delivering the highest quality related to traditional skills and know-how receive no reward for their efforts (Mancini, 2013), which leads some in established systems to replace their use of the GI with a private brand to communicate quality more effectively to more knowledgeable, discerning consumers (Dentoni et al., 2012; Kizos and Vakoufaris, 2011b; Mancini, 2013; Tregear et al., 2007). It is tempting to interpret such efforts as small-scale producers seeking to shift from industrial to

interpersonal world conventions, with GIs acting, perhaps unexpectedly, as a push rather than a pull factor.

If the above presents a rather mixed picture of the potential for GIs to promote higher margins in established systems, what are the implications for nascent systems, particularly in non-typical countries? We argue they are also uncertain. First, although GIs in established systems may reduce leakage of premiums and (sometimes) reward higher quality production, these benefits depend upon products having an existing strong reputation, which buyers recognise and other actors may seek to usurp. It is far less clear how such advantages would apply to nascent systems, where existing renown is modest or very localised, and quality reputations are underdeveloped. The potential for benefits seems even less likely in non-typical countries, where the GI concept and label may be poorly understood in the public domain, hence unlikely to contribute to establishing a reputation. Second, although in nascent systems small-scale producers may have greater flexibility to build groups that work to their own advantage (as established interests and interventions of other value chain actors should often be lighter), the leadership and managerial skills needed to bring such a group to fruition are considerable, and may be particularly difficult to develop in non-typical countries where institutional resourcing, training and mentoring are limited. Overall, it is uncertain whether GIs do provide premium and margin capturing opportunities for small-scale producers, particularly those in nascent systems in non-typical countries.

Collective action

The second way in which GIs may facilitate upgrading is by stimulating collective action between producers in a system. GIs differ from many other forms of quality mark and intellectual property protection by applying to producer groups, not single firms. Through collective action, producers may reap economic advantages such as efficiencies via pooling resources and lowering of transaction costs between producers. Moreover, through Codes of Practice and geographic boundary specifications, GIs may also allow small-scale producers to collectively prevent downstream lead firms from introducing new suppliers to the value chain, such as lower cost, non-member competitors. In other words, GIs may offer countervailing power (Galbraith, 1954; Henderson et al., 2002) to improve small producers' bargaining position in the value chain. From an agro-food studies perspective, GIs collective action may also be interpreted as small-scale producers' effort not only to harness a mechanism for improving their position in an industrial world, but also perhaps to create or engage with interpersonal world conventions, where within-group or within-chain interrelations are reciprocal, trustful and intimate, and built upon a platform of shared values.

Evidence from the literature on established systems indicates that GIs can indeed inspire interpersonal world collective action, from which the economic benefits of greater bargaining power and within-group efficiencies accrue (e.g. the cases of Parmigiano Reggiano or Comté cheeses). In other cases, the collective action inspired by GIs seems to be more characteristic of industrial world conventions, where power imbalances in consortia emerge, and large – particularly downstream – lead firms dominate decision-making (Bowen, 2010; Mancini, 2013). For example, Bowen (2010) documents how the strategic interests of powerful distilleries and multinational liquor companies dominate the GI system for tequila. As the GI region for tequila is large (11.2 million hectares) and includes a vast number of agave farmers, distilleries easily switch between the latter for their own advantage. In such cases, consortium membership fails to provide small-scale producers with countervailing power. In nascent GI systems characterised by fewer industrial-scale producers, smaller producers may

be in a stronger position to build and shape interpersonal world consortia with internal governance mechanisms working to their advantage. However, such producer groups may not attain sufficient scale to be anything more than marginal players in value chains, unable to leverage any countervailing power. In non-typical countries where promotion and development of GIs remains weak, small-scale producers may struggle even more to realise the upgrading advantages of collective action.

Diversification into new products and markets

The third way in which GIs may facilitate small-scale producer upgrading is by stimulating diversification into new, higher margin products or markets (Gibbon, 2001), for example entering downstream activities like processing or retailing, or broadening into auxiliary activities such as farm tourism generated from visitors drawn to an area by a product's reputation. Studies of cases in France and Italy identify how PDO/PGI products from established systems can facilitate the growth of auxiliary activities (Ray, 1998) or wider 'basket of goods' rural development, whereby an emblematic agro-food product contributes to development directly via production activities (generating jobs and income), and also through being a focal point for linked initiatives, such as festivals, agro-tourism and gastronomic routes (Tregear et al., 2007). The context for such activities brings to mind once again interpersonal world conventions, in which rural communities characterised by dense, lateral ties and strong cross-sectoral relationships are platforms for diverse activities linked to goods with local, specialised quality. However, this community-led vision of diversification is by no means a feature of all established GI systems: Bessi re (1998), for example, critiques Roquefort production for its weak development links to the regional community, which are akin to those of an industrial world chain. It may be argued that diversification opportunities may be even more difficult to pursue for nascent systems, where product renown is weaker and the position and status of the GI system in the wider community is less secure. Producers in nascent systems may be at a further disadvantage by lacking the skills or capital required to successfully enter diversified markets, a situation exacerbated in non-typical countries where dedicated infrastructure and training is lacking. For example, in the UK many attempts by dairy farmers, both individually and collectively, to engage in downstream activities (e.g. manufacturing cheese) have failed due to a lack of marketing and entrepreneurial skills (McElwee et al., 2006).

Methodology

Given the predominance of studies focusing on established GI systems, the Mak  onion PDO, as an example of a developing/nascent GI system, represents a *critical case* which has 'strategic importance in relation to the general problem' (Flyvbjerg, 2006). Following established practices in case study-based research (Yin, 2009), the analysis utilised multiple sources of evidence. This included scrutiny of relevant documentation (e.g. the PDO Code of Practice), undertaking 12 in-depth interviews, and conducting a shop check, which examined the availability and price of Mak  onions against competitors in Hungarian retail outlets.

Interviewees included the president of the Consortium of Hungarian Onion Producers, Processors and Traders (the controlling body of the Mak  PDO), five onion farmers who were members of the consortium, two onion farmers who were non-members, an industry expert, a wholesaler/trader and a representative of the state tourism agency (*Tourinform*) based in Mak . Interviews with consortium members discussed their farm and onion

production, consortium involvement and operation, impact of consortium membership on production and marketing, as well as future plans. Interviews with non-member farmers focused on reasons for not joining the consortium. Interviews with other actors explored the perceived impact of the PDO, barriers to its development and the reasons for these, in their particular sphere of expertise. Interviews took place between June and September 2013. By the 11th and 12th interviews minimal new insights emerged, implying data and theoretical saturation had been reached. The shop check, conducted in November 2013, noted the availability and price of onions from Makó as well as competitors in 10 retail outlets (six supermarkets, two greengrocers and two markets) in Budapest.

All interviews were conducted in Hungarian and recorded for transcription and content analysis using NVivo10 software. Theoretical thematic analysis of data stemmed from the main objective of the paper – to examine the extent to which GIs may facilitate upgrading amongst small-scale producers in a nascent GI system. This followed the procedures for analysis outlined by Braun and Clarke (2006). The next sections describe the evolution of the Hungarian agro-food sector in recent decades, focusing on the social, political and institutional features which help explain contemporary dynamics and actor behaviour in the Makó GI system and onion chain, followed by an account of how the current system operates and evidence of upgrading strategies.

Findings

The Hungarian agro-food sector and Makó PDO system

During the socialist era, Hungary possessed a bimodal agricultural system consisting of a 'socialised' element (state and co-operative farms), which coexisted alongside household, small-scale production. The state largely directed relationships within socialised agro-food chains with an emphasis on augmenting quantity rather than preserving quality. However, despite mass mechanisation and an extensive network of agricultural research institutions and universities, the productivity of workers on state and co-operative farms remained poor by international standards with employees cynical of Party rhetoric and public socialist institutions (Lampland, 1995). During this era, there was no legal protection of GIs, in fact legislation was not passed until 1997 and the latter largely reflected external factors, specifically conformity with the WTO's TRIPS agreement and EU legislation, associated with membership of both bodies, rather than internal pressures.

The first post-communist government embarked on a process of decollectivisation and land restitution, shrinking dramatically the land area given over to co-operatives and successor companies of former state farms. After stagnation in the 1980s, state socialist agriculture was regarded as a failure, with 'individual farming' championed. However, the farms created were small by international standards: over 90% operated less than 10 ha (Swain, 1999). Most were ill-equipped, financially and technically, to meet the needs of rapidly expanding, largely foreign-owned multiple retailers (Dries et al., 2004). Yet while acknowledging their weak position within modern supply chains, small-scale farmers remain deeply suspicious of any form of co-operation, associating it with a return to 'socialist agriculture'. Guarding their independence, such farmers are often 'conservative and unable to recognise the need for quality and changes in production methods' (Csáki and Forgacs, 2007).

The predicament of the Makó onion PDO reflects this particular socio-economic legacy. The cultivation of onions in Hungary dates back to the 15th century, with the town becoming the leading centre of onion production within the Habsburg Monarchy. Makó's pre-eminence reflected its long, hot and dry summers that slows the development of new

leaves during the formation of onion bulbs, and its rich soils. During the socialist era, a breeding station developed new varieties with high dry-matter content suited to industrial processing, and a drying plant processed 80–90 tonnes of raw onions per day (Tóth, 1998). After regime change, the breeding station and drying plant closed, with the Makó developed varieties long surpassed, in terms of yield and resistance, by new hybrids, bred outside of Hungary. Regarding farm structure, Makó now resembles much of Hungary: a small number of large farms, whose origins are the state and co-operatives farms of the socialist era, and a mass of small-scale farms that individually lack of the volume, control systems and technology to meet the needs of international retailers. The ability of Hungarian agriculture to meet retailers' requirements is hindered by its ageing population, with Hungary's rural areas suffering from ongoing depopulation and consequent loss of services and real purchasing power (Nemes, 2005).

Capturing higher margins from Makó PDO

The Consortium of Hungarian Onion Producers, Processors and Traders, based in Makó, has 64 members. It includes two relatively large growers: Kossuth Cooperative (60 ha of certified PDO Makó onions) and Termix Makó Ltd (10 ha of PDO Makó onions). The remaining production area of certified PDO onions (approximately 130 ha) is accounted for by small-scale producers. Three quarters of PDO designated onions are sold through supermarkets via Zöldség Centrum Ltd, a trader and wholesaler, based in Makó, which is also a member of the consortium. Approximately 10–15% of certified output goes to fruit and vegetable wholesale markets in Szeged and Budapest, with the remainder sold directly to consumers via small-scale, often informal, channels. Not all farmers who are consortium members now grow PDO-designated onions with several reporting that they switched to non-certified varieties for economic reasons.

The Makó PDO was registered officially in 2009. Under the PDO only three onion varieties are permitted: Makói CR (climate resistant), Csanád and Makói Bronz cultivars, all of which were developed during the 1970s and early 1980s at the town's breeding station. The average yield of PDO certified varieties is 25–30 tonnes/ha. This compares with yields for more modern varieties in Hungary of 40–60 and 80–100 tonnes/ha on the most efficient Dutch and German farms. Production costs per kg of Makó PDO onions averaged, in 2013, €0.16–€0.21 per kg, compared to €0.06–€0.11 per kg for higher yielding, non-designated varieties. Farmers reported no changes in their production practices (e.g. input use and intensity) as a result of PDO registration and the implementation of the Code of Practice.

Annual onion consumption in Hungary averages 85,000 tonnes, of which 5000 tonnes is accounted for by Makó PDO onions. The latter's share of the market has dwindled in recent years as imports have grown substantially (Table 1) with Hungary becoming a net importer of onions. The decline in domestic production has been dramatic: by 2012 the area devoted to onions and production volumes were only one-third of those recorded a decade previously. By 2012, Makó PDO onions accounted for approximately 10% of Hungary's total onion production. No PDO certified onions are exported.

In supermarkets, Makó PDO onions sell in 0.75 kg string containers under the Zöldség Centrum brand at a price similar to 1 kg of loose onions (i.e. roughly 33% relative mark-up). The shop check revealed that Makó PDO onions were available only in two of the 10 retail outlets (both larger stores of multiple retailers) and the shelf-space devoted to the product was modest. PDO onion growers reported receiving €0.10–€0.20 per kg for their output, which in most cases was below production costs.⁴ Farmers reported no difference in the price they received for designated and non-designated onions, with a similar picture at wholesale

Table 1. Evolution of the Hungarian onion market.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Area harvested (ha)	6093	5001	4594	3996	2900	3619	2500	2566	2366	1695	2318	2076	2100
Production (tonnes)	174,327	122,330	93,658	118,765	92,192	94,736	69,287	67,364	61,195	40,895	57,592	57,183	59,875
Yield (tonnes per ha)	28.6	24.5	20.4	29.7	31.8	26.2	27.7	26.3	25.9	24.1	24.9	27.5	28.5
Export quantity (tonnes)	18,906	10,804	193	372	2018	2318	2333	2723	1220	1754	2212	2900	2060
Import quantity (tonnes)	8561	10,197	22,150	14,153	11,964	13,295	17,833	13,170	17,291	14,125	12,470	9,619	8,459

Source: Based on Eurostat (2015), FAO (2015) and Központi Statisztikai Hivatal (2015).

level. On this basis, only at the retail level of the supply chain is there a difference between the price of PDO designated and non-designated onions.

No producer uses the PDO label as they sell in bulk. Zöldség Centrum does apply the PDO logo on designated onions destined for supermarkets, alongside its own branding. However, to fulfil its contracts with supermarkets, Zöldség Centrum also imports onions from Holland and Germany, which are packaged in a similar manner, with Zöldség Centrum branding, albeit without the PDO logo. PDO-certified onions are thus not marketed in a particularly distinctive manner and some imported onions may be confused with those grown in Makó. While Makó is famous for its onions in Hungary, consumers overwhelmingly are unfamiliar with the EU agro-food quality schemes and the consortium president reported widespread suspicion, so 'if we put the PDO label on the package, it repels people. They think for sure they cheat and it comes not from Makó'.

Interviewed producers were overwhelmingly pessimistic about achieving a higher margin for Makó PDO onions, with the perception that few consumers are willing to pay a higher price for the designated varieties on the one hand, with lower yields, worsening genetics and lower resistance compared with more modern varieties presenting production challenges on the other hand. Rather than the PDO being an asset for facilitating upgrading via achieving greater added value for their production, producers regarded it as an impediment tied to outdated varieties.

Collective action from Makó PDO

A presidency, elected by members, manages the consortium. It has nine members: a president, two vice-presidents and six ordinary members. The president of the consortium since April 2011 has been the owner-manager of Zöldség Centrum, which also owns Termix Makó. The consortium was established in February 2003, as a producers' organisation rather than as a vehicle for obtaining a PDO. The PDO application was submitted in October 2005. Consortium membership fees are relatively modest, approximately €13 per annum for small-scale producers and €267 for companies/larger producers. Internal resources are thus very limited; although Zöldség Centrum spent an additional €33,000 on a marketing campaign to promote PDO Makó onions within supermarkets. The process of applying for and registering the PDO was initiated by the Ministry of Agriculture with involvement of the consortium. This developed in a rather 'top down' manner so that, as one interviewee noted, 'everything was decided by the Ministry of Agriculture and locals were not really involved in the process'.

The consortium monitors usage of the PDO logo and '*Makói hagyma*' label. Interviewees reported minimal abuse of the label, apart from possibly some small-scale market sellers. The Code of Practice is enforced with inspections (e.g. soil and plant) several times a year and farmers reported that quality control systems were robust and enforced effectively. The Code of Practice restricts PDO production to 16 districts of Csongrád County and two in neighbouring Békés County. These geographical boundaries have not proved controversial or a source of conflict. While members largely regarded the consortium's decision-making structure as transparent and democratic, it nonetheless was perceived as ineffective as it has failed to improve the fortunes of growers. As one producer noted 'for the consortium there is nothing important to deal with, as they have no influence on the onion market'. Consequently, some members take little interest in its activities.

PDO registration has not stimulated co-operative activity between farmers (e.g. new forms of collective marketing) and has not increased their bargaining power in the value chain. While actors within the consortium do vary in terms of their power, there is little

competition between them because, as the consortium president recounted, ‘there is nothing to fear [from each other] as production is unprofitable’. All remain relatively weak in the face of international retailers and lack of consumer engagement with the product.

Diversification into new products and markets from Makó PDO

Several non-agricultural services reflect Makó’s renown for onions. The town possesses onion-themed attractions including a *Hagymatikum* (onion-themed spa), *Hagyma Ház* (cultural centre), onion-shaped statue and fountain, and hosts an annual two-day onion festival. The *Hagymatikum* was designed by the revered Hungarian architect Imre Makovecz and opened in 2009. An analysis of the spa’s visitors in 2012 revealed that three quarters were Hungarian, with the majority from Makó itself or the surrounding county. The remaining visitors came from Romania, especially those living close to the Hungarian border. There are also some attractions, such as an adventure park and playground, which have minimal association with onions.

Since the PDO designation was granted in 2009, the number of bed and breakfast houses (6), hotels (1), cafes (4) and restaurants (6) in Makó has remained almost unchanged. There is little involvement of onion farmers in tourism and hospitality or cross-sectional co-operation. For instance one consortium member, noted that while the *Hagymatikum* was a ‘nice initiative’, farmers do not gain directly so that ‘other sectors take advantage of the reputation of the onion while producers, so far, do not benefit from other sectors’. There is no ongoing forum for bringing farmers together with other actors and the PDO designation in itself has not stimulated upgrading via diversification.

The Tourinform informant felt that there were few prospects for onion-based tourism as while the ‘onion is still associated with Makó in the Hungarian mind, alone it is not enough to attract tourists’. However, tourists attracted for other reasons may buy onions while visiting. A LEADER project, established in 2008, sought to develop gastronomic tourist routes in Makó and the wider region, linked to onions and garlic, culinary herbs, the perceived medicinal properties of various fruits and vegetables, ancient livestock breeds, honey and other aspects of cultural heritage. A webpage, CD and brochure were produced from the project, but the webpage is no longer available and the other materials are now all out of stock.

The onion festival attracted 10,000–12,000 visitors per day in 2013. When first established in 1991, the festival was principally a meeting for professional growers. However, over time it has evolved into a wider programme, incorporating sporting and equestrian events, flea market, concerts and a firework display. Some onion-related activities remain such as a culinary competition and exhibition for onion producers with the best winning the ‘golden onion’ prize. The festival draws on local authority and EU rural development funds (circa €160,000 for 2013–14), is free for visitors and exhibiting farmers are charged only a nominal fee.

The PDO has not stimulated the engagement of local actors in downstream processing. In fact, recent decades have witnessed a disengagement from the latter, with the closure of the drying plant. The PDO certified varieties, especially *Csanád*, were developed for this purpose and have high dry matter content. There are no plans to reopen the plant given the perceived lack of market for dried onions.

Discussion

Drawing from a GVC perspective, agro-food studies and the GI literature, this paper began by arguing that although in some circumstances GIs may act as mechanisms for small-scale

producer upgrading – either through improving positioning in value chains characterised by industrial conventions (Ponte and Gibbon, 2005) or engaging with more interpersonal ones (Murdoch and Miele, 1999) – these outcomes appear questionable in other cases, particularly nascent GI systems in non-typical countries. As the Makó PDO case reveals, in practice, negligible upgrading from the GI, in this section we pull together our explanations for this, drawing from factors relating to the nascent character of the system itself, as well as the political and institutional context of this non-typical country.

The first upgrading strategy for small-scale producers involves capturing higher margins for existing products. In established systems located in countries with a GI tradition, GIs support margin capture by acting as quality marks conveying information that consumers care about, in a label that they trust, which stimulates their willingness to pay a premium and also prevents leakage of premiums to fraudulent actors (Moschini et al., 2008; Thiedig and Sylvander, 2000). In the nascent Makó system however, rather than a protection imperative, producers seek to *build* consumer recognition of the product name, and its historic association with quality, from a currently modest base. In this situation, the key contribution a GI can make to margin capture is as a proxy signal of quality which may interest or engage consumers unfamiliar with, or indifferent to, the product name. For this proxy to work however, consumer recognition and positive interpretation of GI labels are needed. In Hungary, the GI concept is not only relatively unfamiliar to the public, but generations of consumers have lived through a political regime that leaves a widespread and enduring mistrust of state-backed claims, inspiring scepticism and negativity towards the official GI designation. The GI literature rarely problematises consumer recognition of official GI labels, perhaps because in established systems GIs are supplementary signals to renowned product names. Our findings suggest that consumer scepticism represents a greater problem in nascent systems, because of the more important role GIs play in awareness and association building around the product name.

Another perhaps more obvious reason for the lack of margin capture by the Makó PDO relates to failings in product quality. In both the GI and wider agro-food literatures, small-scale production is strongly associated with enhanced quality, with traditional varieties and artisan techniques assumed to translate into a range of superior consumption attributes (Murdoch et al., 2000). In studies of established GI systems, lead firms in value chains and ineffective regulators (driven, it is implied, by industrial world conventions) are what pose a threat to GI product quality, by reducing or removing the rewards to small-scale producers for their specialised input. However, in the Makó PDO case, industrial conventions have intervened in a slightly different way to create quality problems, via the historical legacy of state socialism. Driven by an imperative to maximise production to efficiently feed the domestic population and export to other ideologically aligned states, and by harnessing technologies in agronomy and food preservation, actors in the onion chain developed a production and processing system in the Makó region centred on three varieties to supply the state-controlled dried onion market. Decades later, with the dried onion market collapsed and international competitors utilising improved cultivars, the legacy of these policies is onion varieties which may be unique to Makó, but which are now unfit for purpose. A further legacy of the socialist era is a suspicion of attempts to collectively produce and market goods and a lack of customer orientation amongst producers which, combined with weak institutional support for GI applicants, has left the producers ill-equipped to design Codes of Practice centred on product quality. The decision to specify exclusively the three outdated varieties in the designation is one which now renders the GI an obstacle to margin capture, as producers cannot switch to higher yielding or better eating quality varieties. Overall therefore, through a combination of system nascence and

socio-political context, the PDO label for Makó has failed to improve margins for small-scale producers.

The second upgrading strategy relates to the potential for GIs to stimulate collective action amongst small-scale producers, resulting in either an improved bargaining position in value chains characterised by industrial conventions or creation of an alternative chain characterised by interpersonal conventions (Murdoch and Miele, 1999). In established GI systems, the main barriers to GIs fostering collaboration derive from power imbalances in consortia (Bowen, 2010), with a tendency for more powerful actors to design the Codes of Practice and dominate the negotiations, so that benefits are captured and retained by an elite few, with a lack of democratic decision-making. Hence, studies conclude successful collective action for GIs depends on good *internal* governance: strong leadership, collective vision and an organisational process perceived to be fair (Bowen, 2010). We proposed that the establishment of such governance may be more likely in nascent systems, where small-scale producers have greater control over how consortia are built. In practice, the Makó case suggests something different, which we attribute to its non-typical country context. Although as expected, there is less evidence of elite capture of benefits in Makó compared with established systems, the legacy of state socialism has left this generation of producers with little experience or skill in joint mobilisation of activity to improve their value chain position, and little by way of local social fabric on which the trustful, reciprocal relations of an interpersonal world chain can be built. Farmers remain deeply sceptical of collective action in both production and marketing. In many ways, the Makó PDO represents the opposite of an empowering experience for these producers, being a largely externally driven, top-down process from which they felt excluded, resulting in a consortium that has created neither a shift in their marginal status in the value chain nor an evolution in their interrelations. The lack of dedicated institutional support, training and role models, such as would be more available to nascent groups in 'typical' GI countries, compounds the likelihood of weak collective action. Overall, we conclude that country context, in particular, explains why the Makó PDO has not stimulated this upgrading strategy, and hence we argue that rectifying strategies for nascent systems should focus on *factors external to the GI system* as well as aspects of internal governance normally emphasised in the GIs literature.

The third upgrading strategy relates to diversification, either into downstream activities to capture additional gains from the value chain, or auxiliary activities, e.g. farm tourism and gastronomic routes. For Makó, the configuration of the domestic onion value chain limits the options for downstream engagement, particularly given Makó's nascent status: multiple retailers dominate and offer little prospect of capturing higher margins, whilst short supply chain alternatives (e.g. farmers' markets, consumer buying groups) may provide some opportunities, but their share of the market is under-developed and decreasing relative to multiple retailers (Euromonitor, 2014). The prospects for engagement in processing are also unpromising, given limited market opportunities, and the fact that new processing activities of any sort would require investment or support in equipment, plant and training which would likely be beyond this nascent group. Auxiliary activities have emerged in the Makó case (e.g. the *Hagymatikum* and festival), but to date the involvement of, and direct benefits to producers are minimal. The non-typical country context plays a role here, specifically the absence of infrastructure and enduring institutional support for cross-sectional development, and a lack of experience or ability of most farmers to provide non-agricultural goods and services. Notwithstanding the precedents of the *Hagymatikum* and festival, it is also debatable whether as a nascent group, the Makó consortium would have sufficient financial and cultural capital to spearhead, or even contribute substantially to, a 'basket

of goods' rural development strategy. The Makó case highlights starkly the restricted potential of GIs to promote diversification-based upgrading in comparison to established GI systems in 'typical' countries.

Conclusion

In contemporary agro-food value chains, small-scale suppliers struggle to gain an advantageous positioning relative to more powerful downstream firms, on whom they are transactionally dependent. This paper has examined the potential of GIs to improve their situation, either through better positioning in current value chains, or via new forms of relationship in alternative chains. GI legislation first emerged as a defensive mechanism to protect the renown of established GI systems from inferior copycats, and existing research confirms how this mechanism can work effectively for such systems, particularly in countries with a history of support for GIs. However, more recent policymaking envisions GI systems also as *enabling institutions* that can improve the fortunes of small-scale producers and contribute to rural development (European Parliament and the Council of the European Union, 2012). Member States are encouraged to support the formation of consortia and the official registration of additional, nascent GI systems. As demonstrated in this paper however, there are fundamental differences between reputation protection and reputation building, and the outcomes achieved for established GI systems do not transfer inevitably to nascent systems, particularly where the latter are located in countries with little historical or institutional support for GIs. While distinguishing between nascent and established GI systems is fundamental to understanding the varying outcomes of upgrading strategies for small-scale producers, it is absent from much of the GIs literature, which tends to discuss the *universal* ability of GIs to aid upgrading. This paper argues, and illustrates with the case of the Makó onion PDO, that for GIs to stimulate upgrading in nascent systems, particularly those located in non-typical countries, certain actions are required. We reflect on two of these and how they may be supported.

First, there needs to be a greater emphasis placed on *market orientation* within consortia, by which we mean the notion of the GI system as an entity that establishes strong relationships with buyers it understands well, through providing goods of specialised quality and value. We propose this action is particularly important to facilitate upgrading through capturing higher margins. By definition, nascent systems lack recognition and product renown, therefore producers in these systems should be particularly active in building that recognition, not least through making connections with consumers and understanding quality from the latter's perspective. To date, there has been a lack of institutional and academic attention paid to market orientation in GI systems: state support for new GIs typically concentrates on their legal establishment and operating arrangements (e.g. advice on submitting applications, managing internal governance) rather than how to build strong relationships with other actors in the value chain, whilst much academic research focuses either on internal aspects of marketing and distribution of returns within consortia, and/or is hostile to the concept of market orientation, due to perceived associations with lack of authenticity and industrial conventions. A market orientation may be vital for nascent systems located in non-typical countries, but also more complex to develop, where previous eras of state intervention have enduring impacts on firm and consumer behaviour in value chains, including scepticism towards official GI designations. Training programmes and events in partnership with educators with commercial expertise, and field visits, exchanges and mentoring arrangements with 'successful' nascent producers are all examples of how market orientation may be fostered.

The second action for nascent GI systems is the building of effective networks with regional actors external to the value chain. This is particularly critical for the pursuit of upgrading via diversification, as this strategy relies on the quality of regional infrastructure, skills, technologies and social capital. Unlocking external resources is likely to be particularly important for nascent GI systems which may lack, as in the Makó case, internal capabilities and capital, whilst a regional platform of well-developed infrastructure facilitates cross-sectoral initiatives. While rural development research shows how GI products may be the basis for ‘basket of goods’ strategies, many of these studies focus on emblematic GI products with established renown, and in areas already rich in infrastructure and social vibrancy. Far fewer studies explore the developmental steps nascent GI systems can take to foster cross-sectoral links, but these should be integral to policy assistance to establish or enhance the functioning of nascent GI systems.

Finally, we consider the implications of this study for theory development. For the literature on GIs, we demonstrate the distinctiveness of established and nascent systems, and therefore the need for future research to take a more nuanced approach when conceptualising upgrading or development possibilities for GIs, and the implications for policy. For the wider agro-food studies literature, our research reveals the complex and sometimes counterintuitive nature of GIs, which calls into question some aspects of the way GIs have been theorised so far in this literature. For example, whilst some studies convey GI designations as manifestations of domestic conventions, and GI systems as embedded within the interpersonal world, our work supports the conclusion that as quality marks, GIs can be conceptualised quite compellingly as artefacts of the industrial world, and that many GI systems, both established and nascent, exhibit aspects of market and industrial conventions, with the lead firm manoeuvrings and value chain power imbalances noted by GVC analysts. Rather than aligning GIs unequivocally with specific conventions or theoretical spaces, future research may usefully conceptualise GIs (both designations and systems) as *hybrid* phenomena, with investigations seeking to explain where and how different configurations of actors, and underpinning conventions, emerge. For such analysis, GVC perspectives may be useful, but we recommend supporting these with other perspectives which take account of wider socio-political contexts.

Acknowledgements

The authors are grateful to the handling editor and three anonymous reviewers for their helpful and constructive comments on an earlier version of this paper. Responsibility for any remaining errors lies with the authors.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article:

The research underpinning this paper was conducted as part of COMPETE, a research project supported by the EU's Seventh Framework Programme (Contract No. 312029). For further information about the project: <http://www.compete-project.eu/>

Notes

1. In this paper, 'GI system' refers to the set of actors directly involved in the production, distribution and marketing of a GI good, e.g. farmers, packers, processors, wholesalers, retailers. At least some of these actors may be organised into a formal consortium.
2. Our decision to choose an onion as the case product for this investigation could be questioned on the basis that a raw good invites less consumer engagement than, for example, a cheese or ham. However, several successful GI systems exist for unprocessed products, including Jersey Royal Potatoes and Mela Val di Non apples. Moreover, in Hungary onions are a key ingredient in almost every traditional and typical dish and, as the case study reveals, many consumers distinguish between varieties of onions based on their different sensory and culinary properties.
3. An alternative categorisation of upgrading strategies proposed in the GVC literature comprises 'product', 'process', 'functional' and 'chain' upgrading. Although widely applied, this categorisation was less suited to the focus of the current study, due to the difficulties of distinguishing between 'product' and 'process' upgrading in an agro-food context, as described by Ponte and Ewert (2009), and because of the difficulty of capturing collective action as an explicit upgrading option, a core feature of the GI mechanism which we were seeking to explore.
4. Reasons why the farmers continue to produce the PDO onion, despite it being a loss-making enterprise, include: sunk costs in specialised machinery for onion production, even greater uncertainty of markets for alternative crops suited to the soil type (garlic, flower bulbs), lack of perceived skills to engage in other gainful activities and being too old to learn new methods, and personal/emotional connections with the crop.

References

- Akerlof GA (1970) The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 84: 488–500.
- Barham E (2003) Translating terroir: The global challenge of French AOC labelling. *Journal of Rural Studies* 19: 127–138.
- Barrientos S, Gereffi G and Rossi A (2011) Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review* 150: 319–340.
- Bessi re J (1998) Local development and heritage: Traditional food and cuisine as tourist attractions in rural areas. *Sociologia Ruralis* 38: 21–34.
- Boltanski L and Th venot L (1991) *De La Justification: les  conomies de la grandeur*. Paris: Gallimard.
- Bowen S (2010) Embedding local places in global spaces: Geographical indications as a territorial development strategy. *Rural Sociology* 75: 209–243.
- Bowen S and De Master K (2011) New rural livelihoods or museums of production? Quality food initiatives in practice. *Journal of Rural Studies* 27: 73–82.
- Braun V and Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3: 77–101.
- Coe NM, Dicken P and Hess M (2008) Global production networks: Realizing the potential. *Journal of Economic Geography* 8: 271–295.
- Coombe RJ and Aylwin N (2011) Bordering diversity and desire: Using intellectual property to mark place-based products. *Environment and Planning A* 43: 2027–2042.
- Cs ki C and Forg cs C (2007) Restructuring market relations in food and agriculture of Central Eastern Europe: Impacts upon small farmers. In: Swinnen JFM (ed.) *Global Supply Chains, Standards and the Poor*. Wallingford: CABI, pp. 209–227.
- Dentoni D, Menozzi D and Capelli MG (2012) Group heterogeneity and cooperation on the geographical indication regulation: The case of the "Prosciutto di Parma" Consortium. *Food Policy* 37: 207–216.
- De Roest K and Menghi A (2000) Reconsidering 'traditional' food: The case of Parmigiano Reggiano cheese. *Sociologia Ruralis* 40: 439–451.
- Dobson PW, Waterson M and Davies SW (2003) The patterns and implications of increasing concentration in European food retailing. *Journal of Agricultural Economics* 54: 111–125.

- Dries L, Reardon T and Swinnen JFM (2004) The rapid rise of supermarkets in Central and Eastern Europe: Implications for the agrifood sector and rural development. *Development Policy Review* 22: 525–556.
- Euromonitor. (2014) *Grocery Retailers in Hungary*. London: Euromonitor.
- European Parliament and the Council of the European Union. (2012) *Agricultural Product Quality Schemes (COM(2010)0733 – C7-0423/2010 – 2010/0353(COD))*. Brussels: European Parliament.
- Eurostat. (2015) *CN8 Database, Eurostat*. L-2721 Luxembourg-Kirchberg, Luxembourg.
- FAO. (2015) *FAOSTAT Database*. Rome: FAO.
- Flyvbjerg B (2006) Five misunderstandings about case-study research. *Qualitative Inquiry* 12: 219–245.
- Galbraith JK (1954) Countervailing power. *American Economic Review* 44: 1–6.
- Galtier F, Belletti G and Marescotti A (2013) Factors constraining building effective and fair geographical indications for coffee: Insights from a Dominican case study. *Development Policy Review* 31: 597–615.
- Gereffi G (2014) Global value chains in a post-Washington Consensus world. *Review of International Political Economy* 21: 9–37.
- Gereffi G and Fernandez-Stark K (2011) *Global Value Chain Analysis: A Primer*. North Carolina: Center on Globalization, Governance & Competitiveness (CGGC), Duke University.
- Gereffi G, Humphrey J and Sturgeon T (2005) The governance of global value chains. *Review of International Political Economy* 12: 78–104.
- Gibbon P (2001) Upgrading primary production: A global commodity chain approach. *World Development* 29: 345–363.
- Hanf JH (2014) *Processor Driven Integration of Small-Scale Farmers into Value Chains in Eastern Europe and Central Asia*. Rome: FAO.
- Henderson J, Dicken P, Hess M, et al. (2002) Global production networks and the analysis of economic development. *Review of International Political Economy* 9: 436–464.
- Hingley MK (2005) Power imbalance in UK agri-food supply channels: Learning to live with the supermarkets? *Journal of Marketing Management* 21: 63–88.
- Hingley MK, Lindgreen A and Casswell B (2006) Supplier-retailer relationships in the UK fresh produce supply chain. *Journal of International Food and Agribusiness Marketing* 18: 49–86.
- Kizos T and Vakoufari H (2011a) Alternative agri-food geographies? Geographic indications in Greece. *Tijdschrift Voor Economische En Sociale Geografie* 102: 220–235.
- Kizos T and Vakoufari H (2011b) Valorisation of a local asset: The case of olive oil on Lesbos Island, Greece. *Food Policy* 36: 705–714.
- Központi Statisztikai Hivatal. (2015) *STADAT Database*. Budapest: Központi Statisztikai Hivatal.
- Lampland M (1995) *The Object of Labor: Commodification in Socialist Hungary*. Chicago, IL: University of Chicago Press.
- London Economics. (2008) *Evaluation of the CAP Policy on Protected Designations of Origin (PDO) and Protected Geographical Indications (PGI)*. London: London Economics.
- McElwee G, Anderson A and Vesala K (2006) The strategic farmer: A cheese producer with cold feet? *Journal of Business Strategy* 27: 65–72.
- Mancini MC (2013) Localised agro-food systems and geographical indications in the face of globalisation: The case of Queso Chontaleño. *Sociologia Ruralis* 53: 180–200.
- MARD (2011) New Hungary Rural Development Programme: Version 7, <http://enrd.ec.europa.eu/sites/enrd/files/fms/pdf/BA7C138A-FDD7-59D3-D551-31889C39623C.pdf> (accessed 23 June 2015).
- Morgan K, Marsden T and Murdoch J (2006) *Worlds of Food: Place, Power, and Provenance in the Food Chain*. Oxford: Oxford University Press.
- Moschini G, Menapace L and Pick D (2008) Geographical indications and the competitive provision of quality in agricultural markets. *American Journal of Agricultural Economics* 90: 794–812.
- Murdoch J, Marsden T and Banks J (2000) Quality, nature, and embeddedness: Some theoretical considerations in the context of the food sector. *Economic Geography* 76: 107–125.
- Murdoch J and Miele M (1999) ‘Back to nature’: Changing ‘worlds of production’ in the food sector. *Sociologia Ruralis* 39: 465–483.

- Neilson J, Pritchard B and Yeung H (2014) Global value chains and global production networks in the changing international political economy. *Review of International Political Economy* 21: 1–8.
- Nemes G (2005) *The Politics of Rural Development in Europe*. Budapest: Institute of Economics, Hungarian Academy of Sciences.
- Parrott N, Wilson N and Murdoch J (2002) Spatializing quality: Regional protection and the alternative geography of food. *European Urban and Regional Studies* 9: 241–261.
- Ponte S and Ewert J (2009) Which way is “up” in upgrading? Trajectories of change in the value chain for South African wine. *World Development* 37: 1637–1650.
- Ponte S and Gibbon P (2005) Quality standards, conventions and the governance of global value chains. *Economy and Society* 34: 1–31.
- Ponte S and Sturgeon T (2014) Explaining governance in global value chains: A modular theory-building effort. *Review of International Political Economy* 21: 195–223.
- Profeta A, Balling R, Schoene V, et al. (2010) Protected geographical indications and designations of origin: An overview of the status quo and the development of the use of Regulation (EC) 510/06 in Europe, with special consideration of the German situation. *Journal of International Food and Agribusiness Marketing* 22: 179–198.
- Rangnekar D (2011) Remaking place: The social construction of a geographical indication for Feni. *Environment and Planning A* 43: 2043–2059.
- Ray C (1998) Culture, intellectual property and territorial rural development. *Sociologia Ruralis* 38: 3–20.
- Storper M and Salais R (1997) *Worlds of Production: The Action Frameworks of the Economy*. Cambridge, MA: Harvard University Press.
- Swain N (1999) Agricultural restitution and co-operative transformation in the Czech Republic, Hungary and Slovakia. *Europe-Asia Studies* 51: 1199–1219.
- Thiedig F and Sylvander B (2000) Welcome to the club? An economical approach to geographical indications in the European Union. *Agrarwirtschaft* 49: 428–437.
- Torre A (2006) Collective action, governance structure and organizational trust in localized systems of production. The case of the AOC organization of small producers. *Entrepreneurship and Regional Development* 18: 55–72.
- Tóth F (1998) *A Makói Hagyma*. Makó: Makói Monográfia.
- Trebbin A and Hassler M (2012) Farmers’ producer companies in India: A new concept for collective action? *Environment and Planning A* 44: 411–427.
- Tregear A, Arfini F, Belletti G, et al. (2007) Regional foods and rural development: The role of product qualification. *Journal of Rural Studies* 23: 12–22.
- Van Der Meer CLJ (2006) Exclusion of small-scale farmers from coordinated supply chains. In: Ruben R, Slingerland M and Nijhoff H (eds) *Agro-food Chains and Networks for Development*. Dordrecht: Springer, pp. 209–218.
- Wilson N, Van Ittersum K and Fearne A (2000) Co-operation and co-ordination in the supply chain: A comparison between the Jersey Royal and the Opperdoezer Ronde potato. In: Sylvander B, Barjolle D and Arfini F (eds) *The Socioeconomics of Origin Labelled Products in Agri-food Supply Chains*. Versailles: INRA, pp. 95–102.
- WTO. (1994) *Trade-Related Aspects of Intellectual Property Rights*. Geneva: WTO.
- Yin RK (2009) *Case Study Research: Design and Methods*. London: Sage.